

June 24, 2015

Mr. Scott Rice
U.S. EPA Region 3
Waste and Chemicals Division
1060 Chaplin Street, Suite 303
Wheeling, WV 26003-2995

**RE: School District Of Philadelphia
PCB Transformer Compliance Project
Deed Notice - Strawberry Mansion High School**

**KEATING
ENVIRONMENTAL
MANAGEMENT, INC.**

835 Springdale Drive
Suite 200
Exton, PA 19341

610.594.2600 P
610.594.6100 F

keatingenvironmental.com



**KEATING
ENVIRONMENTAL
MANAGEMENT**

*Environmental,
Energy &
Sustainability
Solutions*

Dear Scott:

On behalf of the School District of Philadelphia's Office of Environmental Management & Services, enclosed is the deed notice for the Strawberry Mansion High School. This document is associated with the encapsulated concrete located proximate to the former transformer with the serial number 3475168. This transformer was removed from service during the summer of 2014. The deed notice was officially recorded by the City of Philadelphia's Commissioner of Records on May 6, 2015.

With the submission of this additional information to USEPA, will EPA be approving the Final Cleanup Plan?

As always, please feel free to contact me if you have any questions or require additional information.

Best regards,
Keating Environmental Management, Inc.


Keith Choper

Enclosure

Cc: Francine Locke
Jerry Junod,
Carl Everett, Esq., Saul Ewing, LLP (electronic copy)

A WBE Certified
Corporation



Printed on
recycled paper



Prepared By:

Carl B. Everett, Esq.
Saul Ewing LLP
Centre Square West
1500 Market Street, 38th Floor
Philadelphia, PA 19102



52912065
Page: 1 of 25
05/06/2015 12:02PM

Return To:

Carl B. Everett, Esq.
Saul Ewing LLP
Centre Square West
1500 Market Street, 38th Floor
Philadelphia, PA 19102

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12:02PM
Doc Code: DM

Doc Id: 52912065
Receipt #: 1480365
Rec Fee: 252.00
Commissioner of Records, City of Philadelphia

OPA #78-4374200

DEED NOTICE

THIS DEED NOTICE is made as of the 17th day of March, 2015, by **SCHOOL DISTRICT OF PHILADELPHIA**, a political subdivision of the Commonwealth of Pennsylvania, with administrative offices located at 440 North Broad Street, Philadelphia, Pennsylvania 19130 (together with its successors and assigns, collectively "Owner").

W I T N E S S E T H:

WHEREAS, Owner is the owner in fee simple of certain real property located at **3133 Ridge Avenue, Philadelphia, Pennsylvania**, more particularly described on Exhibit A attached hereto and made a part hereof (the "Property"); and

WHEREAS, pursuant to a Consent Decree entered in the United States District Court for the Eastern District of Pennsylvania on September 11, 1997, in the United States of America v. The School District of Philadelphia, Civil Action No. 97-3829 ("Consent Decree"), Owner is obligated, inter alia, to file recordation notice of the Consent Decree.

WHEREAS, paragraph 8.b of the Consent Decree provides, "In the event of PCB contamination remains at a Facility, the School District shall file and record the removal and disposal plan as a deed notification and restriction notifying any subsequent purchaser of the Facility to remove and properly dispose of contaminated material prior to any activity that would disturb the contaminated material (such as renovation or demolition)."

WHEREAS, the PCB Removal and Disposal Plan dated November, 2014, attached hereto as Exhibit B, (i) describes the remedial actions that were performed; (ii) describes and summarizes the sampling which was performed after completion of the remedial actions; and (iii) describes the proper removal and disposal procedures for the transformers and the contaminated concrete.

WHEREAS, as more fully provided in the Consent Decree, notice of the Consent Decree shall be included in all subsequent deeds, title or other instruments conveying an interest in the Property.

WHEREAS, this Deed Notice itself is not intended to create any interest in real estate in favor of the EPA, nor to create a lien against the Property, but merely is intended to provide record notice of the Consent Decree.

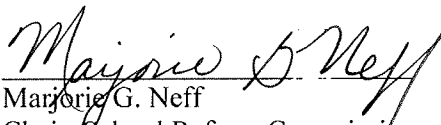
NOW, THEREFORE, Owner hereby notifies, by this Deed Notice, all interested parties, owners, lessees and operators of the Property of the Consent Decree.

FURTHER, the obligations of Owner of this Property with respect to all requirements and provisions of the aforementioned Consent Decree shall be binding upon the Owner and upon any and all persons who subsequently become owner of any portion of the Property upon which encapsulated PCB contaminated material exists.


[Signatures on the following page]

IN WITNESS WHEREOF, Owner has executed this Deed Notice as of the date first written above.

THE SCHOOL DISTRICT OF PHILADELPHIA

By: 
Marjorie G. Neff
Chair, School Reform Commission

APPROVED AS TO FORM:


Elizabeth C. Gutman, Esquire
Assistant General Counsel
The School District of Philadelphia

COMMONWEALTH OF PENNSYLVANIA :
: SS
COUNTY OF PHILADELPHIA :

On this 17th day of March, 2015, before me a Notary Public in and for the Commonwealth of Pennsylvania, the undersigned officer, personally appeared **Marjorie Neff**, who acknowledged himself to be the Chair of the School Reform Commission, acting on behalf of the School District of Philadelphia, and that she as Chair, being authorized to do so, executed the foregoing instrument for the purposes therein contained by signing the name of the School District of Philadelphia by himself as Chair.

In Witness Whereof, I hereunto set my hand and official seal.

Michelle Ann Reed [SEAL]
Notary Public

My Commission Expires:

November 14, 2017

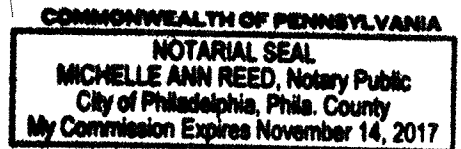


Exhibit A

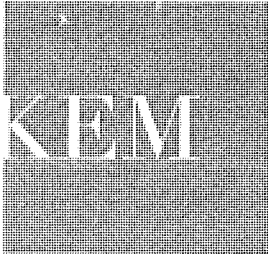
Legal Description

ALL THAT CERTAIN lot or piece of ground with the buildings and improvements thereon erected. SITUATE in the 28th Ward of the City of Philadelphia, described as follows, to wit:-

BEGINNING at the intersection of the westerly side of 31st Street (50 feet wide) and the southerly side of Dauphin Street (50 feet wide) thence extending southwardly along the said westerly side of 31st Street 530 feet to a point on the northerly side of Susquehanna Avenue (60 feet wide); thence extending westwardly along the said northerly side of Susquehanna Avenue 226 feet 2-1/4 inches to a point, on the northeasterly side of Ridge Avenue (60 feet wide); thence extending northwestwardly along the said northeasterly side of Ridge Avenue 59 feet 11-5/8 inches to an angle point; thence still extending northwestwardly along the said northeasterly side of Ridge Avenue 207 feet 6-1/8 inches to a point; on the easterly side of 32nd Street (50 feet wide); thence extending northwardly along the said easterly side of 32nd Street (50 feet wide) 327 feet 6-3/4 inches to a point on the said southerly side of Dauphin Street; thence extending eastwardly along the said southerly side of Dauphin Street 400 feet to a point on the said westerly side of 31st Street, being the first mentioned point and place of beginning.

BEING KNOWN AS NO. 3133 Ridge Avenue.

BEING the same premises which Philadelphia Transportation Company, by Deed dated May 5, 1961 and recorded in the Philadelphia Department of Records in Deed Book CAB 1619, page 159, granted and conveyed unto School District of Philadelphia, in fee.



Keating Environmental Management, Inc.

Exhibit B

PCB Removal and Disposal Plan

PCB Removal and Disposal Plan

Strawberry Mansion High School
2200 N. 31st Street
Philadelphia, Pennsylvania

File No. 2050

November 2014

Prepared for:

The School District of Philadelphia
Office of Environmental Management & Services
Philadelphia, PA

**PCB REMOVAL AND DISPOSAL PLAN
STRAWBERRY MANSION HIGH SCHOOL
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**THE SCHOOL DISTRICT OF PHILADELPHIA
PCB REMOVAL AND DISPOSAL PLAN
TRANSFORMER NO. 3475168
STRAWBERRY MANSION HIGH SCHOOL**

1.0 INTRODUCTION

This Removal and Disposal Plan summarizes the interim remedial actions that were performed during August of 2014 at the Strawberry Mansion High School located at 2200 N. 31st Street in Philadelphia, Pennsylvania. This Removal and Disposal Plan is specifically applicable to the former location of the transformer with the Serial No. 3475168. This transformer was removed during August of 2014. This report:

- Summarizes the remedial actions that were performed;¹
- Describes and summarizes the sampling which was performed after completion of the interim remedial actions; and
- Describes the proper removal and disposal procedures for the contaminated concrete.

This Removal and Disposal Plan has been prepared as a component of the Deed Restriction that is described within the Consent Decree entered in US v. School District of Philadelphia, Civil Action No. 97-3829².

2.0 REMEDIAL ACTION

On August 7, 2014, during the removal of the transformer with the Serial No. 3475168, it was observed that following the removal of the dielectric fluid from the transformer, a small amount of fluid contacted the concrete floor below the transformer's drain valve. The USEPA was notified and an interim cleanup plan was presented for approval and immediately initiated. That interim cleanup plan incorporated the application of multiple coats of an epoxy encapsulant over a conservatively defined area of impacted concrete.

The encapsulant utilized was a Rust-Oleum "Epoxyshield™" coating that is resistant to chemicals and abrasion. The floor area that was encapsulated is subject to infrequent foot-traffic and essentially no mechanical abrasion. The coats of epoxy that were applied were of different colors so that it will be visually apparent in the unlikely event that the epoxy coating becomes degraded. Initially, a gray epoxy encapsulant was applied. Subsequently, a layer of tan epoxy encapsulant was applied over the initial layer. The tan epoxy encapsulated area was also extended beyond the initial gray layer to be conservative. Finally, an additional layer of epoxy encapsulant (gray) was placed over the entire tan epoxy encapsulated area.

Appendix A contains product data regarding the Epoxyshield™ product. Figure 1 shows the location of the encapsulated areas proximate to both of the transformers that were removed from the Strawberry Mansion High School.

¹ For additional information regarding the interim remedial actions which have been completed relative to the former PCB transformer with the Serial Number 3475168, refer to the Final Report for this location dated November 2014.

² A PCB removal and Disposal Plan that is a component of the Deed Notification that was recorded on June 22, 2010 with the Commissioner of Records of the City of Philadelphia is applicable to PCB contaminated concrete that is proximate to the former PCB transformer with the Serial Number 3475167 that was also removed from the Strawberry Mansion High School during 2014.

3.0 POST-ENCAPSULATION SAMPLING

On August 16, 2014, five post-encapsulation wipe samples and one field blank were obtained. All of the wipe samples were of the epoxy coated floor area for the purpose of confirming that the encapsulant was effective. A wipe sample of the encapsulated surface which contained a PCB concentration of less than 10 $\mu\text{g}/100\text{cm}^2$ was considered adequate confirmation. All of the wipe samples had a non-detectable concentration of PCBs.

Photographs were taken and a scaled sketch was developed to document the areas which have been encapsulated. These records are being maintained by the School District's PCB Coordinator. Copies of the photographs are provided in Appendix B.

4.0 REMOVAL AND DISPOSAL OF THE PCB CONTAMINATED CONCRETE

PCB contaminated concrete, including the epoxy-coated contaminated concrete, will be removed if renovation or demolition activities occur that would disturb the contaminated material. PCB contaminated concrete will be disposed in accordance with TSCA (Toxic Substances Control Act) regulations.

Prior to the removal of any PCB contaminated concrete, the School District shall conduct a structural engineering evaluation to determine the depth to which concrete can be safely removed. Concrete removal prior to demolition will only be performed if it can be accomplished without jeopardy to the structural integrity of the area and if the removal action will result in the complete removal of the contaminated concrete.

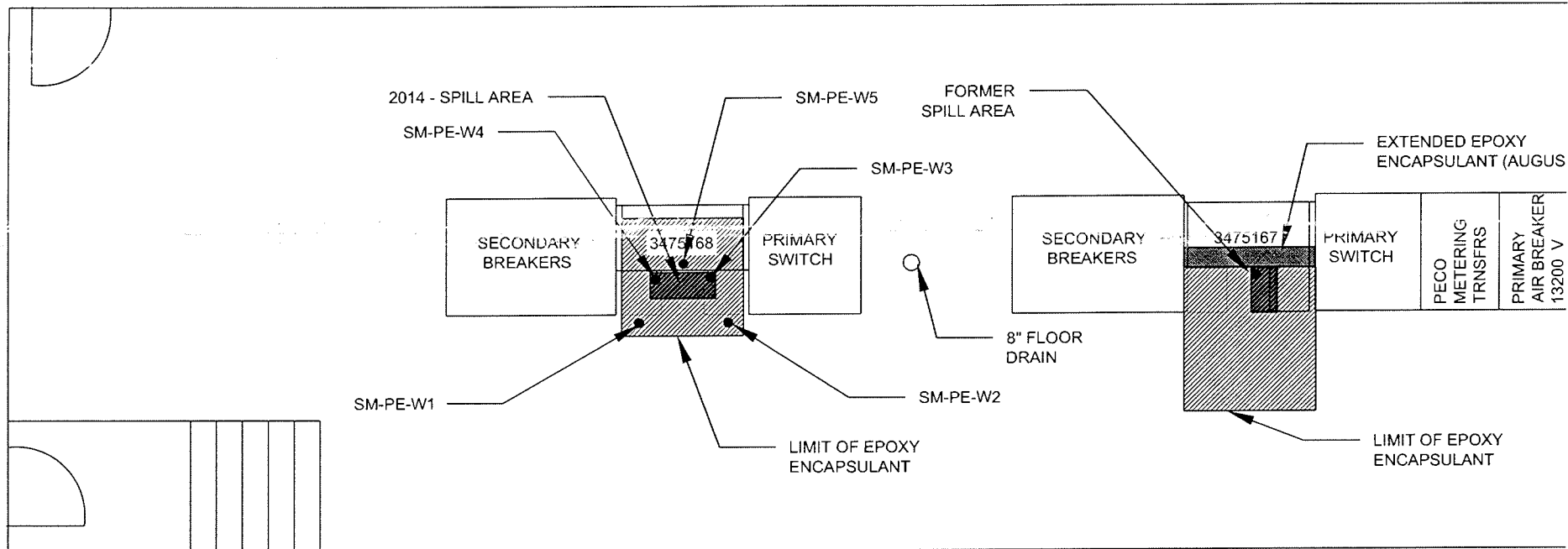
PCB contaminated concrete will be removed by either scabbling, where the surface of the concrete will be abraded to below the depth of contaminated concrete, or by bulk removal methods.

Where scabbling is utilized, in the absence of structural engineering constraints regarding the depth of concrete which can be removed, removal of concrete will be done to achieve the cleanup levels for porous surfaces as required in 40 CFR 761.61(a)(4)(iii).

All waste concrete will be placed within properly labeled 55-gallon drums that meet USEPA and DOT shipping requirements. However, if the Strawberry Mansion High School is demolished, it may not be practical to place bulk contaminated concrete into shipping drums. At that time, the utilization of lined roll-off containers for the transportation of PCB contaminated concrete to a licensed TSCA permitted chemical waste landfill/disposal facility will be evaluated.

FIGURE 1

EXTENT OF EPOXY ENCAPSULATION



1. This Figure is a revision to Figure 3 of the February 1998 "Final Report" for Strawberry Mansion High School.
2. The transformers that are depicted in this figure were removed during August 2014 and replaced with non-PCB transformers.
3. A September 2, 2014 letter to the School District of Philadelphia provides a narrative regarding the spill, interim remedial actions and post-encapsulation wipe samples that were taken August of 2014 during the removal of the transformer with the Serial Number 3475168.
4. ● SM-PE-W4 Post-encapsulation wipe sample location (typ)

Prepared By: CO

Scale: 1"=6'

Post-Encapsulation/Assessment Sampling Locations

File No. 2050

Checked By: KC

Date: 10/21/14

Strawberry Mansion High School
3133 Ridge Avenue
Philadelphia, PA

Figure 1

APPENDIX A

TECHNICAL DATA – EPOXY ENCAPSULANT



EPOXYSHIELD® WATER-BASED EPOXY GARAGE FLOOR COATING

DESCRIPTION AND USES

A two component, water-based epoxy floor coating designed for finishing concrete garage floors that are in good sound condition and are free of curing agents and sealers. It is not intended for use on unsound previous coatings or floors that have a moisture problem.

PRODUCTS

251965	Gray Gloss
251966	Tan Gloss
252625	Tint Base Gloss

APPEARANCE

Dries to a gloss finish. Solid base color with a color fleck finish. Available in Gray or Tan colors and a tint base that can be tinted to 32 colors.

PACKAGING

Floor Coating comes as a kit
Part B Base 90 fluid ounces (2.67 liters)
Part A Activator 30 fluid ounces (0.89 liters)
Decorative chips and EPOXYShield® Concrete Etch

PRODUCT APPLICATION

SURFACE PREPARATION

Allow new concrete to cure for a minimum of 28 days. Sweep away all loose dirt and debris. Remove any oil spots, grease or spills and wash the floor with a suitable detergent or degreasing solution and rinse. Then etch the floor using the Concrete Etch.

PREVIOUSLY COATED FLOORS: Make sure the floor is clean and dry. Use a wire brush to remove any loose or peeling paint or stain. If floor is sealed, the sealer will have to be removed by grinding or shot blasting. To ensure proper adhesion, scuff sand the entire surface. **WARNING!** If you scrape, sand or remove old paint, you may release lead dust. **LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE.** Wear a NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

PRODUCT APPLICATION (cont.)

MIXING

Premix both components (Parts A and B) thoroughly to ensure any settled pigment is re-dispersed before adding the activator (Part A) to the base (Part B). It is critical to add all of Part A to B and mix for 3 minutes. Do not mix the color chips in with the coating. Allow the coating to stand before using. See induction period on page 2. Mix again just prior to application. The activated coating must be used within 1-2 hours after the mixing based on temperature.

APPLICATION

Apply only when air, material, and surface temperatures are between 60-85°F (15-29°C) and the surface temperature is at least 5°F (3°C) above the dew point. The relative humidity should not be greater than 85%. After allowing for the induction period, cut in the perimeter of the floor along the wall, or other areas where a roller cannot reach, using a brush or edger before beginning roller application. Use a synthetic 1/4" nap roller cover on a 9" roller frame to apply an even coat of EPOXYShield® onto the surface. Limit the application to 4x4 foot (1.2x1.2m) sections at a time to make it easier to distribute the colored chips onto the freshly coated surface. Scatter the decorative chips up and away from you so they land flat on the wet paint, then continue on to the next section. Note: Fresh paint can be applied over the loose chips lying outside the previously painted area. Maintain a wet edge to prevent lap marks and gloss differences. Only one coat is necessary under most circumstances. EPCxYShield® must be used within 1 to 2 hours of initial mixing.

CLEAN-UP

Wash tools and equipment with warm water and a mild detergent immediately after use. To remove dried product use lacquer thinner. Clean up drips or spatters IMMEDIATELY with water as dried paint is very difficult to remove. Properly dispose of all soiled rags.

TECHNICAL DATA

EPOXYSHIELD® WATER-BASED EPOXY GARAGE FLOOR COATING

If temp is 60-70°F (16-21°C)

Allow product to stand after mixing

Start brushing (trimming edges): 30 minutes after mixing

Start rolling: 45 minutes after mixing

Use all mixed product within (pot life): 2 hours after mixing

Best time to paint is mid-afternoon (after 1 PM) to ensure best curing conditions and maximum pot life.

If temp is 71-80°F (22-27°C)

Allow product to stand after mixing

Start brushing (trimming edges): 10 minutes after mixing

Start rolling: 15 minutes after mixing

Use all mixed product within (pot life): 1.5 hours after mixing

Best time to paint is early morning (before 9 AM) to ensure best curing conditions and maximum pot life.

If temp is 81-85°F (27-29°C)

Start brushing (trimming edges): Immediately after mixing

Start rolling: 5-15 minutes after mixing

Use all mixed product within (pot life): 1 hour after mixing

Best time to paint is early morning (before 9 AM) to ensure best curing conditions and maximum pot life.

TECHNICAL DATA

EPOXYSHIELD® WATER-BASED EPOXY GARAGE FLOOR COATING

PHYSICAL PROPERTIES

		WATER-BASED EPOXY GARAGE FLOOR COATING
Resin Type		Amine cured epoxy
Pigment Type		Varies with color
Solvents		Ethylene glycol monopropyl ether, Water
Weight*	Per Gallon	10.50-10.60 lbs.
	Per Liter	1.25-1.27 kg
Solids*	By Weight	62.6-63.3%
	By Volume	52.6-52.8%
Volatile Organic Compounds*		<100g/l (0.80 lbs./gal.)
Mixing Ratio		3:1 Base to Activator (by volume)
Recommended Dry Film Thickness (DFT) Per Coat		3.0-3.5 mils (75-87.5µ)
Wet Film to Achieve DFT (Unthinned Material)		6.0-7.0 mils (150-175µ)
Theoretical Coverage at 1 mil DFT (25µ)		844-847 sq.ft./gal. (20.7-20.8 m²/l)
Practical Coverage at Recommended DFT (assumes 15% material loss)		Approximately 250 sq.ft./kit. (23 m²/l)
Induction Period		Varies with temperature – See chart in directions
Pot Life @ 70-80°F (21-27°C) and 50% Rel. Hum.		Varies with temperature – See chart in directions
Dry Times at 70-80°F (21-27°C) and 50% Rel. Hum.	Foot Traffic	24 hours
	Vehicle Traffic	3 days
Shelf Life		5 years
Safety Information	Flash Point	205°F (96°C) Activated material
	Contains	—
	Warning!	FOR ADDITIONAL INFORMATION, SEE MSDS.

Calculated values may vary slightly from the actual manufactured material.

*Activated material.

The technical data and suggestions for use contained herein are correct to the best of our knowledge, and offered in good faith. The statements of this literature do not constitute a warranty, express, or implied, as to the performance of these products. As conditions and use of our materials are beyond our control, we can guarantee these products only to conform to our standards of quality, and our liability, if any, will be limited to replacement of defective materials. All technical information is subject to change without notice.

Material Safety Data Sheet

24 Hour Assistance:
1-847-367-7700

1. Identification

Product Name: EPOXY 2GLK GRAY GLS 2.5 GARAGE Kit **Revision Date:** 5/30/2013

Identification Number: 251870

Product Use/Class: Garage Floor Coating/Epoxy Kit

Supplier: Rust-Oleum Corporation
11 Hawthorn Parkway
Vernon Hills, IL 60061
USA

Manufacturer: Rust-Oleum Corporation
11 Hawthorn Parkway
Vernon Hills, IL 60061
USA

Preparer: Regulatory Department

2. Hazard Identification

EMERGENCY OVERVIEW: Causes eye irritation. Causes skin irritation. May cause allergic skin reaction.

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Extremely irritating to the eyes and may cause severe damage, including blindness. Substance causes severe eye irritation. Injury may be permanent.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material.

EFFECTS OF OVEREXPOSURE - INHALATION: High vapor concentrations are irritating to the eyes, nose, throat and lungs.

EFFECTS OF OVEREXPOSURE - INGESTION: Substance may be harmful if swallowed.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Contains Titanium Dioxide. Titanium Dioxide is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC. Significant exposure is not anticipated during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of Titanium Dioxide in the formula. Contains carbon black. Chronic inflammation, lung fibrosis, and lung tumors have been observed in some rats experimentally exposed for long periods of time to excessive concentrations of carbon black and several insoluble fine dust particles. Tumors have not been observed in other animal species (i.e., mouse and hamster) under similar circumstances and study conditions. Epidemiological studies of North American workers show no evidence of clinically significant adverse health effects due to occupational exposure to carbon black.

Carbon black is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC and is proposed to be listed as A4- "not classified as a human carcinogen" by the American Conference of Governmental Industrial Hygienists. Significant exposure is not anticipated during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of carbon black in the formula. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

3. Composition/Information On Ingredients

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL-TWA	OSHA PEL- CEILING
Bisphenol A Epoxy Resin	25085-99-8	20.0	N.E.	N.E.	N.E.	N.E.
Aliphatic Polyamine	MIXTURE	20.0	N.E.	N.E.	N.E.	N.E.
Titanium Dioxide	13463-67-7	15.0	10 mg/m3	N.E.	15 mg/m3 [Total Dust]	N.E.

Ethylene Glycol Monopropyl Ether	2807-30-9	5.0	25 ppm (Skin)	N.E.	N.E.	N.E.
o-Cresyl Glycidyl Ether	2210-79-9	5.0	N.E.	N.E.	N.E.	N.E.
Amorphous Silica	7631-86-9	5.0	N.E.	N.E.	0.8 mg/m3	N.E.
Carbon Black	1333-86-4	1.0	3 mg/m3	N.E.	3.5 mg/m3	N.E.

4. First-aid Measures

FIRST AID - EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

FIRST AID - SKIN CONTACT: Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

FIRST AID - INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation.

FIRST AID - INGESTION: If swallowed, do not induce vomiting. If victim is conscious and alert, give 2 to 4 cupfuls of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Treat symptomatically and supportively.

5. Fire-fighting Measures

Flash Point, °F 155 (Setaflash)

Extinguishing Media: Alcohol Foam, Carbon Dioxide, Dry Chemical, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: No Information

SPECIAL FIREFIGHTING PROCEDURES: Water may be used to cool closed containers to prevent buildup of steam. Full protective equipment including self-contained breathing apparatus should be used. Evacuate area and fight fire from a safe distance.

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers.

7. Handling and Storage

HANDLING: Wash thoroughly after handling. Use only in a well-ventilated area. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid contact with eyes, skin and clothing.

STORAGE: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame.

8. Exposure Controls/Personal Protection

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation.

RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or in any other circumstances where air purifying respirators may not provide adequate protection.

SKIN PROTECTION: Use gloves to prevent prolonged skin contact. Nitrile or Neoprene gloves may afford adequate skin protection.

EYE PROTECTION: Use safety eyewear designed to protect against splash of liquids.

OTHER PROTECTIVE EQUIPMENT: Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

HYGIENIC PRACTICES: Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

9. Physical and Chemical Properties

Vapor Density	Heavier than Air	Odor:	Mild
Appearance:	Liquid	Evaporation Rate:	Slower than Ether
Solubility in Water:	Miscible	Freeze Point:	N.D.
Specific Gravity:	1.272	pH:	N.D.
Physical State:	Liquid		

(See section 16 for abbreviation legend)

10. Stability and Reactivity

CONDITIONS TO AVOID: Avoid temperatures above 120 ° F.

INCOMPATIBILITY: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

HAZARDOUS DECOMPOSITION: When heated to decomposition, it emits acrid smoke and irritating fumes.

HAZARDOUS POLYMERIZATION: No Information

STABILITY: No Information

11. Toxicological Information

<u>Chemical Name</u>	<u>LD50</u>	<u>LC50</u>
Bisphenol A Epoxy Resin	N.E.	N.E.
Aliphatic Polyamine	>2000 mg/kg (Rat, Oral)	N.E.
Titanium Dioxide	>7500 mg/kg (Rat, Oral)	N.E.
Ethylene Glycol Monopropyl Ether	3089 mg/kg (Rat)	>2132 ppm (Rat, 6Hr)
o-Cresyl Glycidyl Ether	5800 mg/kg (Rat, Oral)	1220 ppm (Rat, 4Hr)
Amorphous Silica	>7500 mg/kg (Rat)	>250 mg/m3 (Rat, 6Hr)
Carbon Black	>8000 mg/kg (Rat, Oral)	N.E.

12. Ecological Information

ECOLOGICAL INFORMATION: Product is a mixture of listed components.

13. Disposal Information

DISPOSAL INFORMATION: Dispose of material in accordance to local, state and federal regulations and ordinances. Do not allow to enter waterways, wastewater, soil, storm drains or sewer systems.

14. Transport Information

	Domestic (USDOT)	International (IMDG)	Air (IATA)
Proper Shipping Name:	Not Regulated	Not Regulated	Not Regulated
Hazard Class:	N.A.	N.A.	N.A.
UN Number:	N.A.	N.A.	N.A.
Packing Group:	N.A.	N.A.	N.A.
Limited Quantity:	No	No	No

15. Regulatory Information**U.S. Federal Regulations:****CERCLA - SARA Hazard Category**

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Acute Health Hazard

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name**CAS-No.**

Ethylene Glycol Monopropyl Ether

2807-30-9

Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA 12(b) components exist in this product.

International Regulations:**CANADIAN WHMIS:**

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

Canadian WHMIS Class:

D2A D2B

16. Other Information**HMIS Ratings:**

Health: 2* Flammability: 2 Physical Hazard: 0 Personal Protection: X

NFPA Ratings:

Health: 2 Flammability: 2 Instability: 0

Volatile Organic Compounds, g/L: 92

REASON FOR REVISION: Regulatory Update

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

Rust-Oleum Corporation believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. Rust-Oleum Corporation makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.

APPENDIX B

PHOTOGRAPHIC DOCUMENTATION



Photo 1 – Transformer No. 3475168 Nameplate.



Photo 2 – Transformer No. 3475168 prior to removal activities.

Signature: *Paul M. Dean*

Photograph Documentation

Date: 8/06/2014

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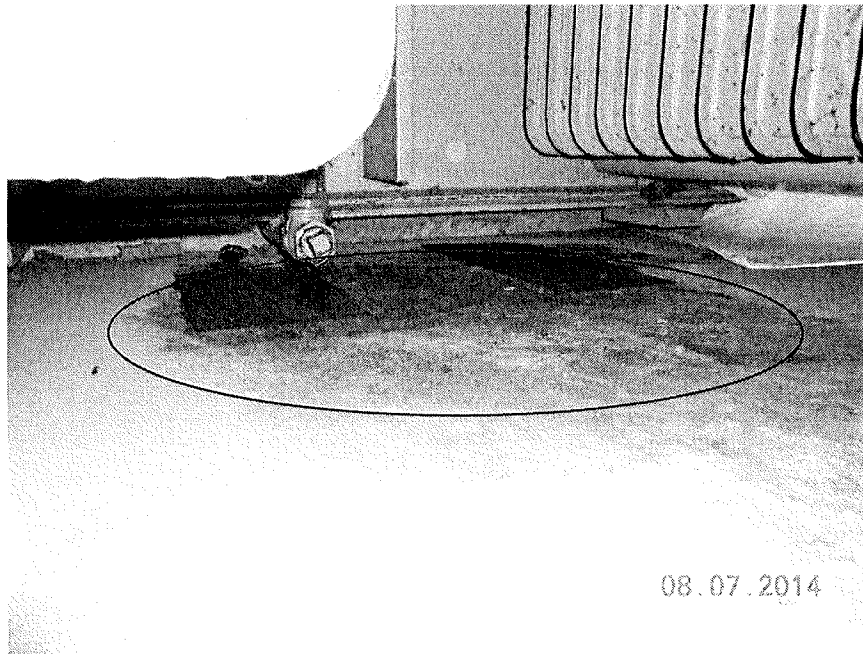


Photo 3 – Transformer No. 3475168 area of release (indicated in red).



Photo 4 – Transformer No. 3475168 – following detergent cleaning of floor and initial layer of gray epoxy encapsulant.

Signature: Paul M. Quinn

Date: 8/07/2014

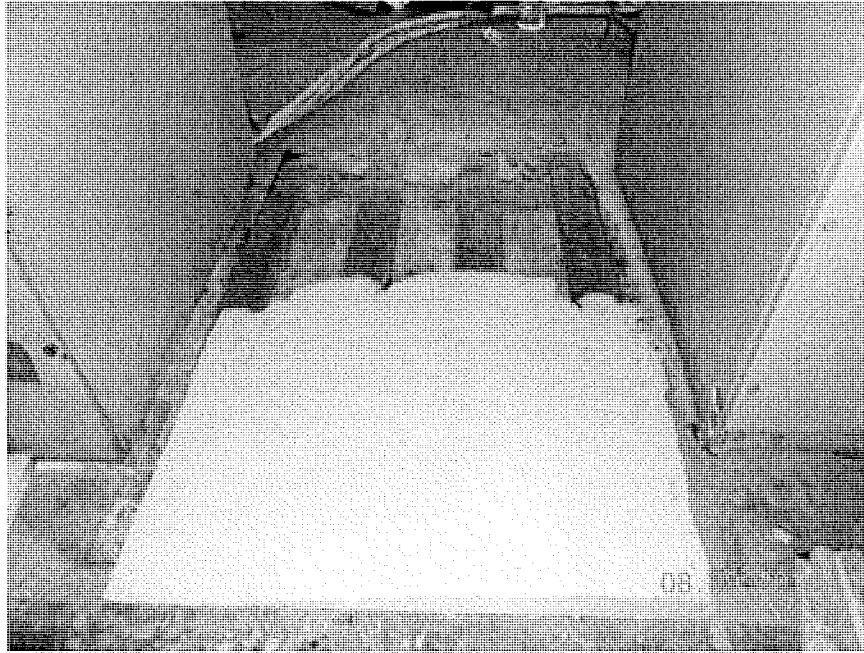


Photo 5 – Transformer No. 3475168 following removal of transformer.



Photo 6 – Transformer No. 3475168. Tan epoxy encapsulant “lower” layer.

Signature: *Paul M. Davis*

Date: 8/09/2014

Photograph Documentation

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Photo 7 – Transformer No. 3475168. Gray epoxy encapsulant “top” layer.

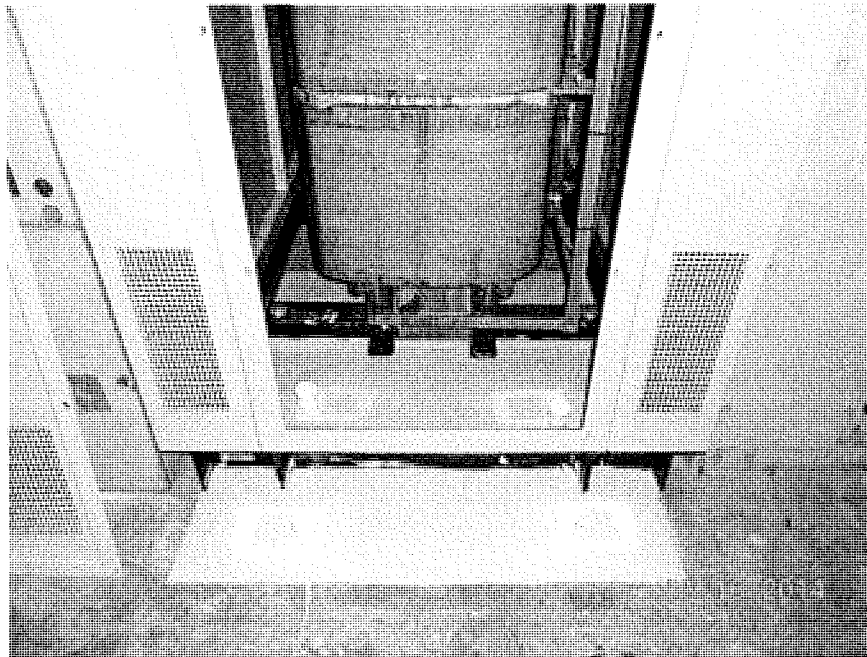


Photo 8 – Transformer No. 3475168. Post encapsulant PCB wipe sampling locations (wipe sample No. 5 is obscured from view).

Signature: Paul M. Quinn

Date: 8/16/2014

Photograph Documentation

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